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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/822,440 | 04/12/2004 | Wai Ming Choi | 072545-0083 | 1434 |

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| EXAMINER | |
|---|---|
| PIZIALI, ANDREW T | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 1771 | |

DATE MAILED: 11/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| **Advisory Action Before the Filing of an Appeal Brief** | **Application No.** 10/822,440 | **Applicant(s)** CHOI ET AL. | |
|---|---|---|---|
| | **Examiner** Andrew T. Piziali | **Art Unit** 1771 | |

***--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --***

THE REPLY FILED 13 November 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
   a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
   b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

   Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: _____.
   Claim(s) objected to: _____.
   Claim(s) rejected: *1-20*.
   Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

Continuation of 11. does NOT place the application in condition for allowance because:

Applicant's arguments are not persuasive.

The applicant asserts that Dong fails to teach or suggest "adjusting" the pH, but the applicant admits that Dong discloses that the pH of the slurry ranges from about 5 to about 10. The applicant asserts that the claimed gamma value can only be obtained by forming a slurry having one pH value and then adjusting the pH to a value of about 6 to 12, preferably 7 to 10. The examiner respectfully disagrees. The current specification fails to teach or suggest that the pH value must be adjusted to obtain the claimed gamma value. Although the current specification discloses that a pH adjusting process can be used to obtain the desired end pH value of 6 to 12, preferably 7 to 10, the specification falls well short of teaching that this adjusting step is necessary. Rather, the specification teaches that the final pH value of 6 to 12, preferably 7 to 10, is responsible for the improved filtration properties (see [0024], [0030], and [0032]). The applicant has failed to show, or attempt to show, that an adjusting step is necessary to obtain the claimed gamma value.

The Patent and Trademark Office can require applicants to prove that prior art products do not necessarily or inherently possess characteristics of claimed products where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes; burden of proof is on applicants where rejection based on inherency under 35 U.S.C. § 102 or on prima facie obviousness under 35 U.S.C. § 103, jointly or alternatively, and Patent and Trademark Office's inability to manufacture products or to obtain and compare prior art products evidences fairness of this rejection, In re Best, Bolton, and Shaw, 195 USPQ 431 (CCPA 1977).

In response to applicant's argument that Dong is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See In re Oetiker, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Dong is in the field of applicant's endeavor which is wet laid methods of making glass fiber mats (see column 1, lines 4-11 of Dong and [0003] of the current specification).

In response to applicant's argument that Dong does not use the glass fiber mat as filters, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Regarding the rejections in view of Perez, the applicant asserts that the surface area cannot merely be modified to have a specific value. The applicant asserts that the surface area "has to be obtained." Applicant's statement is noted, but regardless, Perez provides this conventional teaching showing that it is known in the filtration art to use a surface area of greater than 0.25 m2/gm, typically about 0.5 to 30 m2/g (see column 2, lines 8-21). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the surface area from about 0.5 to 30 m2/g, motivated by the expectation of successfully practicing the invention of Pierce.

In response to applicant's assertion that one skilled in the art would be unable to modify the nonwoven filter media to obtain the claimed surface area, it is well settled that unsupported arguments are no substitute for objective evidence. In re Pearson, 494 F.2d 1399, 1405, 181 USPQ 641, 646 (CCPA 1974).

The applicant asserts that there is no motivation to combine Pierce and Pall. The examiner respectfully disagrees. Pierce does not appear to mention varying the pH of the nonwoven glass layer during the wet laid process, but Pall discloses that it is known in the wet laid nonwoven glass art to vary the resulting pH in the range of from about 7 to about 10 to result in a nonwoven glass layer with excellent strength and enhanced particulate removal efficiency (see entire document including column 2, lines 34-46, the paragraph bridging columns 5 and 6, and column 6, lines 52-63). It would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the pH of the nonwoven glass layer during the wet laid process to about 7 to about 10, as taught by Pierce, because the nonwoven filter media would advantageously possess excellent strength and enhanced particulate removal efficiency.

Regarding the teachings of Palls, the applicant asserts that there is no motivation to adjust the pH of the slurry of Pierce because the binder of Pierce is added after the mat if formed. The applicant appears to misinterpret the rejection. The examiner contends that it would have been obvious to utilize the wet laid process of Palls. More specifically, it would have been obvious to add the binder to the slurry before the mat if formed, as taught by Palls, as well as vary the pH from about 7 to about 10, as also taught by Palls, to form a filter media with excellent strength and enhanced particulate removal efficiency.

11/21/06

ANDREW PIZIALI
PRIMARY EXAMINER